

IMPACT OF AGRICULTURAL STAFF TRAINING AND DEVELOPMENT ON AGRICULTURAL PRODUCTIVITY: A CASE OF BUBI DISTRICT, ZIMBABWE

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ABSTRACT

The study sought to explore the impact Agricultural staff training and development on agricultural productivity in Zimbabwe, using Bubi District as a case study. The study opted for a mixed approach, the quantitative and qualitative methods because they complement each other's weaknesses. A sample of 30 Agricultural Extension (Agritex) workers, 15 farmers and 5 key informants was used in the study. Research instruments were 30 questionnaires distributed to the extension workers, 2 focus group discussions with farmers and 5 in-depth interviews with key informants. Findings revealed that some extension workers were not receiving training and those trained, training was inadequate. The government is failing to invest fully in personnel development programmes to enhance agricultural productivity. To the cluster being trained, information is not fully disseminated to the farmers and this has a negative impact on agricultural productivity. It is against this backdrop that the study is recommending the Agritex department to run five mandatory training programmes per individual per year. The Agritex department should ensure their officers are well resourced and skilled in order to enhance agricultural productivity in Zimbabwe.

Keywords: Agricultural Productivity, Development, Extension Worker, Training.

INTRODUCTION

Owing to the decline in Agricultural productivity in Zimbabwe since the year 2000, this study seeks to investigate the impact of staff training and development programmes offered by Agritex in Zimbabwe. Despite evidence that investment in agriculture has beneficial impact on agricultural productivity, it would seem there is a decline in public expenditure in agriculture in most developing countries (Akroyd & Smith, 2007). The World Bank (2007) states that the proportion of official development going towards agriculture declined from about 18.0 percent in 1979 to 3.5 percent in 2004. The indication is that training and development of Agritex workers has been affected, and this has had a negative impact on agricultural productivity. As shown by Anderson (2008), agricultural extension implies an organisation which supports and facilitates people engaged in agricultural production to obtain skills, information and technologies. In this case, the study focuses on extension workers, employed by the Agricultural Technical and Extension Services, which falls under the Ministry of Agriculture.

BACKGROUND INFORMATION

Agritex has a prime mandate to provide extension services to farmers. According to the Republic of Zimbabwe Ministries Service Charter (2000:98), Agritex mission statement says, "To generate, provide and promote agricultural technologies, information, linkages, support

and regulatory service, through high quality research, extension co-ordination and liaison, thus enhance economically viable agriculture on sustainable basis."

Zimbabwe's economy is primarily agro-based, as such the Ministry of Agriculture, within which the department of Agricultural Technical and Extension Services (Agritex) falls, has always played a critical role in facilitating national development. According to the Performance Audit and Inspectorate Agency (2004), Agriculture alone and its agro-related industries have contributed approximately 52% to the gross domestic product (GDP) of Zimbabwe during the period extending from 1998 to 2000.

During the 1980s to the late 1990s, a successful Ministry of Agriculture played a critical role in Zimbabwe which resulted in the country being designated the bread basket status of Southern Africa. During that period, Agritex was the pride of Africa (Narman, 1991) before the ravage of Economic Structural Adjustment Programme (ESAP) in the 1990s and land reform programme in 2000. Agritex had a network of highly experienced and qualified staff in Zimbabwe. The advice and training offered was unparalleled anywhere on the continent (Narman, 1991), and for a time the service was well resourced with extension workers reasonably paid and with transport to move around. Today, the extension is a sorry reflection of the past glories because many qualified staff left and a lesser numbers passed away due to HIV and Aids pandemic.

Production has suddenly gone down from year 2000 to 2012 after the adoption of the fast track land reform programme in the year 2000 by the government. The majority of black Zimbabweans were allocated land despite the fact that most of them were inexperienced, justifying the need for staff training of Agritex Officers and development programmes as a stop measure to restore Zimbabwe's bread basket status. According to the Performance Audit and Inspectorate Agency (2004), a downfall of productivity has resulted in poverty in rural areas and economic down turn as Zimbabwe is an agro based economy.

Literature indicates variations and deficiencies in skills, knowledge and ability among extension workers (Wheeler, 2007 & Wheeler, 2008). In support of this argument, Yadav et al, (2013) claim that agricultural extension worldwide face some challenges in professional competence among their employees. As such, they recommend planning, training and management of human resources in organisations, which essentially increases the capabilities and effectiveness of extension manpower.

Consistent with Yadav et al (2013)'s recommendations, grassroots Agritex workers in Bubi District must be equipped with agricultural knowledge and technical skills which they should transfer to the farming community. Since 2000, training and development (TD) programmes have been instituted for the whole of the public service personnel including Agritex staff. The study therefore sought to answer the question; what is the impact of Agritex training and development on agricultural productivity in Bubi District?

LITERATURE REVIEW

IMPORTANCE OF AGRITEX STAFF TRAINING AND DEVELOPMENT IN AGRICULTURE

The role of agricultural extension in the development of agriculture is not in doubt throughout the world because it has remained one of the prime movers of agricultural productivity and development in rural communities (Anaeto et al 2012). Researchers further contend that no

nation will have real growth without the agricultural sector having effective Agritex officers. Increased agricultural productivity primarily depends on acceptance of technological and cultural changes within the agricultural sector. What it entails is that for farmers to positively respond, Agritex officers need to be properly educated on new ideas and practices of farming, which they too will transmit to the farmers. Training and development becomes a necessary component in order to boost agricultural productivity. Additionally, they should take cognisance of farmers' indigenous knowledge as an entry point (Ndlovu, Moyo, Zikhali and Mabhena, 2015).

Zimbabwe was once recognised as a country with the best agricultural extension services in the tropical Africa (Raikes, 1988). Narman (1991) claims the main task of the Agricultural, Technical and Extension Services was to transmit new techniques to farmers. The field staff employees provide farmers with non-formal training on the use of new production techniques, the economic benefits and financial returns that can be yielded when new techniques are used (Narman, 1991). Fisher (1983) posit that the job of the extension officer can be defined as a system of training extending beyond the classroom. Vandn Ban and Hawkin (1988) argues their role is to provide information to farmers, so that that they can form sound opinions to make good decisions. Anaeto (2003) and Asiabaka (2002) looks at extension from a modern perspective, arguing that extension officers are not only there to train farmers, but other members of the community who benefit from the farming products. They identified important (Ndlovu, Moyo, Zikhali and Mabhena ,2015) dimensions of agricultural extension services; the educational component which helps in changing the behaviour and attitude of farmers, the economic dimension which helps to improve the living standard of the farmer and the social dimension which includes improved health of the farmer, leadership development and increased zeal for development.

Anaeto et al (2012) argue that people are mistaken on the role of extension officers in the community. From their observation, people limit agricultural extension to helping farmers to get inputs, but for an agricultural project to to succeed, agricultural extension officers must be involved from planning to execution. Anaeto (2003) relates agricultural extension work to production improvement, marketing, storage, input supply, farm mechanisation, and programme planning and evaluation. What it shows is that the extension officers must be equipped with the knowledge of assisting the farmer. As shown by FAO (2010), there is increasing evidence and recognition that what matters for development is human capital in agricultural.

Extension service officers cover the national, provincial, district and village levels. However, the system has its shortcomings. New techniques, not provided to the extension officers, have an effect on the farmers. Similarly, agricultural productivity is also affected. According to (FAO, 2010) agricultural extension help farmers through educational procedures, in improving farming methods and techniques. The results are a better agricultural productivity for the lives of farmers socially and economically.

Jones (2016) argues agriculture is a subset of national economies of many developing countries. As such, the agricultural workforce contributes towards the agricultural productivity. Jones also observes that historically, agriculture as a vocation has not been incorporated into the wage labour economy of many developing countries and to this end, the concept of staff training and development in the agricultural sectors becomes less clear. This affects the work of Agricultural extension officers who provide information to farmers about new production techniques and technologies (Davies, 2008 and Rogers, 1988).

Extension is not concerned with generating knowledge which is done at specialised institutions such as the agricultural college or agricultural research centres. Rather, the extension takes this information to the farm family. Extension therefore is the process whereby this information is communicated to the farm family and this is done by an extension officer who is in direct contact with farmers. What it means is that farmers have to be trained in different aspects of extension processes. According to FAO (1985), one aspect of this training is to give the extension officer the technical or scientific knowledge required to be passed on to the farmer. It is not enough to be armed with this scientific knowledge, but the extension officer must know how to communicate the information to the farming community (FAO, 1985).

IMPACT OF EXTENSION STAFF TRAINING AND DEVELOPMENT IN AGRICULTURE

ECA (2011) contends that if well implemented, extension staff training and development contributes to local market and industrialisation. Home demand for industrial goods is stimulated via the purchase of producer goods such as fertilizers, pesticides and consumer goods. What it entails is that agriculture makes it feasible for the local industries to grow. Todaro (2009) argues that, staff training has strongly been acknowledged as a contributor to agricultural development. For instance, in Nigeria, extension staff training has remained a key component in the Agricultural sector. Currently, it contributes 40.0 percent of the GDP and 70.0 percent of the active population are employed in the agricultural sector.

Studies have proved that agriculture plays a pivotal role in poverty reduction and economic growth (3ie Synthetic Review, 2010). The review also shows that the impact of staff training in the agricultural sector is wide ranging, from the economic growth, poverty reduction, food security to rural development. Reports by both the World Bank (2007) and United Nations (2008) indicate that the poorest, half of the population, have benefited significantly from agricultural growth, resultantly from trained extension workers, than growth in the other sectors of the economy.

However, Feder (2003) opines that improvement in productivity is only possible if a gap exists between the actual and potential productivity. In support of Feder's (2003) perception, Anderson (2008) and Birkhaenser, Evenson & Feder (1991) argue that extension services play an important role because information is made to flow from the scientists to the farmers through the extension officers. Capacity building and training becomes a prerequisite for economic growth and development. To this end, Gordon and Chadwick (2007) propose individual capacity building of extension workers, which they suggest raises productivity. They contend that individual efficiency captures returns for productivity. The two further argue that innovation as a culture introduces new products and development within the agricultural sector. In their findings, improvements in human capital have contributed to about 30.0 percent increase in total factor productivity.

As shown by Bocker (2009), there is a strong relationship between training activities and their benefits to the community. Studies have proved that training efforts have produced improvements in quality labour force, which has in turn contributed to national economic growth. As such, economists have coined the terms human capital in people referring mainly to schooling and on-the-job training (Wang et al, 2002). Training activities on staff development have the potential to produce some benefits such as inclusion of the country in powerful economic blocks.

In conclusion, it can be noted that training and development to farmers has the following benefits; increased local food availability and improved productivity (Rosegrant & Cline, 2011). It provides local markets with enough food, increases farmer income and also enhances the sustainability of agricultural practices. By increasing availability of local food directly, this addresses hunger and poverty problems. Increasing sustainability of agricultural practices ensure food security for the future. For Hartill (2010) training and development ensures increased job satisfaction as well as morale among employees. It ensures employee motivation and efficiency resulting in reduced employee turnover.

RESEARCH METHODOLOGY

In response to the research question, the study used a mixed research approach. According to Tashakkori and Teddlie (2003), a mixed research approach involves mixing qualitative and quantitative research methods or concept characteristic. Stekler et al., (1992) ascertain that the two can compensate each other's weaknesses. The shortcomings of quantitative methods are the strengths of qualitative research methods and the reverse is true. The study was itself exploratory and it sought to ascertain the impact of Agritex staff training on agricultural productivity, using Bubi District as a case study. The target population were extension workers and farmers in the community. The study used a sample of 30 extension workers, 15 farmers and 5 key informants. The researcher used convenience and purposive sampling in identifying the participants respectively. The data collection instruments were questionnaires distributed to extension workers, 2 focus group discussions which were carried with the farmers and in-depth interviews with 5 key informants.

RESULTS

The study sought to find out the impact of Agritex staff training and development on agricultural productivity using Bubi district as a case study. The following were the objectives of the study;

1. To identify the training and development programmes offered to Agritex workers in Bubi district.
2. To evaluate the effects of the training and development programmes on agricultural productivity

PARTICIPANTS BIO-DATA

Table 1: Agritex Participants Bio data (n=30)

Variable	Frequency	f (%)	Total
Gender			
Male	24	80	
Female	6	20	100
Age			
Below 20 years	-	-	
20-30 years	10	33	
31-40 years	08	27	
41-50 years	06	20	
Above 50 years	06	20	100
Academic and Professional Qualifications			
Certificate in Agriculture	02	07	
Diploma in Agriculture	15	50	
Degree in Agriculture	10	33	

Masters in Agriculture	03	10	100
Number of years in Agritex			
Below 10 years	10	33	
10-20 years	15	50	
21-30 years	03	10	
Above 30 years	02	07	100

As shown on table 1 above, the majority were male participants 24(80%) as compared to female participants 6(20%) indicating a gender imbalance. This was attributed to few female extension workers as compared to male extension workers in the studied area. Results also show that the majority of the workers were within the 31-40 years age group, meaning they were responsible family members. On academic and professional qualifications, findings indicate that the majority of participants (50%) were diploma holders. Nonetheless, about 10% were degree holders and key informant one, a manager, indicated that some of them were studying towards a Master's programme. Information on table 1 also reflects that extension workers in Bubi district were experienced as the majority of them were over 10 years of service. What it shows is that these extension workers were mature, educated and experienced people. In this regard, personnel training and development is a requirement in human resource management.

Table 2: Respondents' views on various issues (N=30)

VARIABLE	RESPONSES			
	YES		NO	
	Number	%	Number	%
You received agricultural training during the period extending from 2010 to 2016	20	67	10	33
Agritex offer development programmes related to agriculture	14	47	16	53
Training and development programmes are sponsored	20	67	10	33
Training and development programmes are adequate for you	10	33	20	67
Farmers are benefiting from these training and development programmes	18	60	12	40
There is an improvement on farmers' yields because of these training and development programmes	19	63	11	37

TRAINING AND DEVELOPMENT PROGRAMMES

As shown on table 2, 67% of the participants received training during the period extending from 2010-2016. Participants reported that they received training in the following areas; land use planning, conservation agriculture, induction training and maize production. Results show that 47% of these participants attended development programmes. Development programmes offered were; upgrading programmes, block release, water and sanitation issues, upgrading of certificate holders in agriculture, master farmer training, farmer training on "Indima encane, isivuno esikhaulu" (small portion of land with high yields). This is done through their training and development sub-department operational at national, provincial and

district levels. Agritex Policy requirement states that at least five training programmes should be conducted per individual per year, but unfortunately, one training programme is being offered per year. The majority of participants (67%) reported that these training and development programmes were sponsored by Agritex department and a few (33%) agreed that training and development programmes were adequate for them.

Key informants reported that some extension workers received training and development during the period extending from 2010 to 2016. For those who did not receive training and development, key informants one (1) and three (3) argued that they did so spontaneously. They added that training and development programmes were communicated to Agritex extension officers and those willing participated. Key informants agreed that some training and development programmes were not sponsored by the department. As such, key informant four (4) believed that was the reason why some extension workers failed to attend training and development programmes. Key informants reported that training and development programmes were not adequate, as a district, they needed to concentrate on maize production and other cash crops.

The indication is that Agritex department is making some efforts to train its staff, but the top management should make an effort to support training and development programmes run by the department. The department is failing to sponsor all the training and development programmes, which explains why some extension workers were not attending training. Findings also revealed that training and development programmes were not adequate for the extension workers. To this end, Agritex department had failed to fully equip its employees with new skills, knowledge and abilities to perform better in educating farmers.

EFFECTS OF TRAINING AND DEVELOPMENT PROGRAMMES ON AGRICULTURAL PRODUCTIVITY

Results on table 2 show that 60% of the respondents believe farmers were benefiting from the training and development programmes, with 63% indicating that they had seen an improvement on farmers' yields. These were the views of extension workers, but the researcher sought some clarification from key informants and the farmers. In this regard, the study conducted two focus group discussions with farmers from Bubi district. Findings showed that farmers were not benefiting from training and development programmes. One farmer explained;

I have been a farmer for quite some time, over 30 years to be specific. Long ago, extension workers used to visit us, educating us on new methods and techniques of farming. Not now, you hardly see these people. If there are any programmes, like the Command Agriculture, you hear them through Village Headmen. Currently, we are not benefiting from these so called training and development programmes.

Farmers professed ignorance over farmer education programmes, which should be done by extension workers. In the past, Agritex officers used to visit them, but nowadays, farmers had to travel to their offices for consultations. For those who interact with extension workers, they have benefited from their programmes and have realised increases in their yields. Findings revealed that the majority of these farmers were new who benefited from the government land reform programme, justifying the need for farmer education.

Key informants were interviewed over the effects of training and development on agricultural productivity. Three key informants explained that of late, Zimbabwe has been facing some serious challenges socially, politically and economically. This could have contributed to the

challenges being faced by Agritex workers. The farmers stated that unlike in the past, modern day Agritex officers were not mobile to capture problems experienced by the farmers on the ground. Like any other civil servant in Zimbabwe, they could be disgruntled and not motivated to perform their jobs properly. Another key informant explained that it was difficult to measure the impact of training and development in these circumstances because of droughts which the country has experienced previously.

What it shows is that training and development has no relevance to agricultural productivity even if offered by the department because information is not disseminated to the farmer. The majority of farmers were still new in the field and there is need for them to undergo some form of training. Farmers complained of lack of experience, inadequate visits and non-availability of Agritex personnel on the ground. This malpractice could be associated with poor economic conditions experienced by Zimbabwe which has resulted in lack of follow up of Agritex employees by their supervisors. There is no tangible link between training and development and farming on the ground. Consequently, there are no improvements resulting from training and development programmes. This was evidenced by low agricultural productivity currently being experienced in the area under study. Lack of expertise, guidance and inputs is affecting agricultural productivity.

DISCUSSION OF RESULTS

Training and Development

The role of agricultural extension in the development of agriculture is not in doubt throughout the world because it has remained one of the prime movers of agricultural productivity and development in rural communities (Anaeto et al 2012). Findings in this study are consistent with Akroyd & Smith's (2007) observations to the effect that despite some evidence that investment in agriculture has beneficial impact on agricultural productivity, there is a decline in public expenditure on agriculture in most developing countries like Zimbabwe. Similarly, the World Bank (2007) has also argued that the proportion of official development going towards agriculture, declined from about 18.0 percent in 1979 to 3.5 percent in 2004. The Zimbabwean government is failing to invest in training and development programmes as evidenced by the department of agriculture, which instead of sponsoring five training programmes per individual per year, is offering one training programme per individual per year. Some extension workers are not receiving training at all and consequently, these training and development programmes are not adequate for agricultural productivity.

As observed by Palani (2015) in yet another study, what the government of Zimbabwe is failing to appreciate is that training Agritex officers plays a critical role in planning and implementation of agricultural programmes. The agricultural department is failing to train extension workers to work with farmers from the planning stage to the execution stage. As shown by Burcley (2000), training and development is a long term strategic role. Thus extension workers should be trained in leadership, teamwork and communication so that they can work with the farmers. With transport crisis as evidenced in this study, some researchers have suggested for organisations to come up with new initiatives related to technology (Chepkilot, 2005). Chepkilot (2005) further contends that organisations are substantially investing in employee and development because of the technological advancement as well as organisational success which is dependant on high skills abilities and competencies of employees. Houser (2006) describes training and development as the only way of developing organisation intellectual property which is done through building employees competencies. For Kodwani (2004), training and development is a return for investment therefore it is

important to constantly upgrade the employees. As shown by FAO (2010), there is increasing evidence and recognition that human capital matters for development in agricultural.

Effects of training and development programmes on agricultural development

If well implemented, ECA (2011) contends that Agritex staff training and development contributes to local market and industrialisation. Similarly, Todaro (2009) observed that staff training has strongly been acknowledged as a contributor to agricultural development. However, Bocker (2009) suggests there is a strong relationship between training activities and their benefits to the community, which is not the case in this study. Inconsistent with arguments by Anderson (2008), Todaro (2009), Bocker (2009) and ECA (2011), findings revealed that there is no tangible link between training and development programmes and farming on the ground as evidenced by low productivity currently being experienced in the area under study. Anderson (2008) asserts that agricultural extension implies an organisation which support and facilitate people engaged in agricultural production to obtain skills, information and technologies to ensure a positive impact on agricultural productivity. Narman (1991) claims the main task of the Agricultural, Technical and Extension Services is to transmit new techniques to farmers, which is contrary to findings in this study. The field staff employees are failing to provide farmers with non-formal training on the use of new production techniques, the economic benefits and financial returns that can be yielded when new techniques are used. Vandn Ban and Hawkin (1988) argues their role is to provide information to farmers, so that they can form sound opinions to make good decisions.

CONCLUSIONS

Based on these findings, the researcher concludes that some extension workers are not receiving training at all, and those receiving training, it is inadequate. The government is not fully investing in Agritex training and development programmes. The majority of farmers are new farmers; as such they need to be equipped with farming skills, knowledge and new technology. It is only when Agritex workers receive training and development programmes that they would conduct farmer education programmes. In cases where Agritex workers have been trained, it was observed that they were not disseminating information to new farmers and this has had a negative impact on agricultural productivity in Zimbabwe.

RECOMMENDATIONS

Based on the objectives and conclusions, the study recommends the Department of Agritex to ensure five mandatory training programmes per individual extension worker per year. Agritex staff need to be trained in new farming skills to ensure that information obtained in these training and development programmes is disseminated to the farmers. Extension workers must be provided with enough resources like vehicles to travel around the farming community.

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